

<p>91-105469/15 D16 (D17) AKIN/30.07.86 AKINO T 20:3047-076-A 03.00.89-JP-219951 (+JP-179586) (28.02.91) C12n-09/42 C12n-01/07 New beta-mannanase - hydrolyses beta 1,4-D-mannopyranoside bonds of mannan, glucomannan and galactomannan and can be mfd. at low cost C91-045455</p>	<p>D(5-C3C)</p>
<p>A new beta-mannanase has the following characteristics; it hydrolyses the beta-1,4-D-mannopyranoside bonds of mannan, glucomannan, galactomannan and galactoglucomannan unsingularly to generate mannooligosaccharides; it acts on beta-mannan singularly but does not act on alpha-mannan; it is suited at pH 8-10 and stable at pH 6-10 when heated for 30 mins. at 60 deg.C, while stable up to at 65 deg.C when heated for 30 mins. at pH 8.0; it is inhibited by mercuric chloride, Ag nitrate, (EDTA) Na2, urea, dodecyl Na sulphate and dodecyl benzene Na sulphonate; it has an isoelectric pt. at 5.3-5.4, when measured by chromatofocusing; and it is 37,000 (+/-) 3,000 in mol. wt. when measured by gel filtration. The beta-mannanase is mfd. by culturing a beta-mannanase-generative microbe belonging to Bacillus having its suitable pH at alkalinity to allow it to generate the beta-mannanase in the culture soln. and collecting it. USE/ADVANTAGE - The beta-mannanase is mfd. at low cost. (8pp Dwg.No.0/0)</p>	